

SUPPORT  
**wound healing**  
 AND TISSUE GENERATION.<sup>1</sup>



Extracellular matrix (ECM) is an essential part of wound healing. It provides a natural, collagen scaffold that supports cellular ingrowth.<sup>2</sup> Wounds with a dysfunctional or missing ECM cannot support proper wound closure.<sup>2</sup>

OASIS® Extracellular Matrix is an acellular ECM derived from porcine small intestinal submucosa (SIS). It is composed of collagens, fibronectin, glycosaminoglycans, proteoglycans, and growth factors.<sup>3-13</sup> OASIS aids bioactivity and creates an environment that allows cells in the body to secrete growth factors and replicate.<sup>4,14</sup>

EXTRACELLULAR MATRIX COMPONENTS	EXTRACELLULAR MATRIX COMPONENT FUNCTIONS	OASIS	SKIN
Collagens (I, III, IV, VI) <sup>7-10</sup>	These provide the framework for the infiltration of host cells and lasting strength during the remodelling process. <sup>15</sup>	✓	✓
Growth factors: - fibroblast growth factor (FGF-2) <sup>5</sup> - connective tissue growth factor (CTGF) <sup>13</sup> - transforming growth factor beta (TGF-β) <sup>12</sup>	These factors play a role in angiogenesis, vascular repair and development, and cell migration and proliferation. <sup>16,17</sup>	✓	✓
Glycoproteins, such as fibronectin and other protein-carbohydrate complexes, such as proteoglycans and glycosaminoglycans <sup>3,6,14,18</sup>	These act as chemo-attractors, provide cell attachment sites in the matrix, and help regulate the complex processes of cell migration, proliferation, and differentiation. <sup>19-21</sup>	✓	✓

**Indications for use**

- Burns (second-degree only)
- Chronic vascular ulcers
- Diabetic ulcers
- Donor sites/grafts
- Draining wounds
- Partial- and full-thickness wounds
- Pressure ulcers
- Surgical wounds (post-Mohs' surgery, post-laser surgery, podiatric, wound dehiscence)
- Trauma wounds (abrasions, lacerations, skin tears)
- Venous ulcers

Easy to store. Easy to handle.



STORE AT ROOM TEMPERATURE



24-MONTH SHELF LIFE

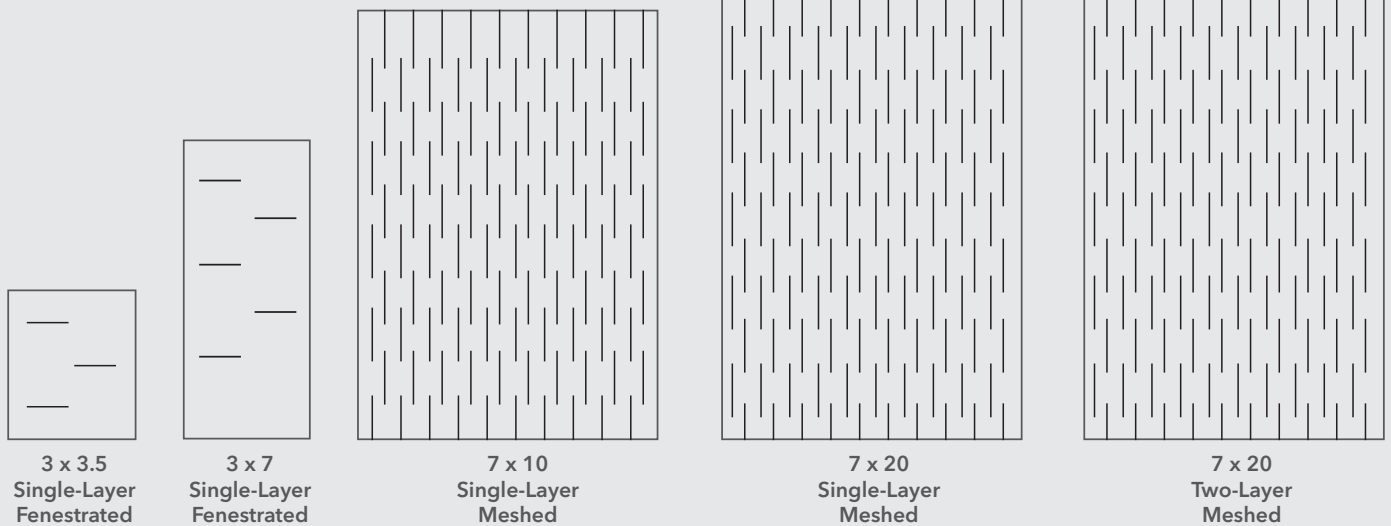


NO ADVANCE PRODUCT PREPARATION



STERILISED

Order Number	Reference Part Number	Size cm	Qty per Box
G47319	C-ECM-1F-3X3.5-2	3 x 3.5	10
G47320	C-ECM-1F-3X7-2	3 x 7	10
G47321	C-ECM-1M-7X10-2	7 x 10	1
G47322	C-ECM-1M-7X20-2	7 x 20	1
G47318	C-ECM-2M-7X20-2	7 x 20	1



- Hodde JP, Allam R. Small intestinal submucosa wound matrix for chronic wound healing. *Wounds*. 2007;19(6):157-162.
- Clark RA. Fibrin and wound healing. *Ann NY Acad Sci*. 2001; 936:355-367.
- McPherson TB, Badylak SF. Characterization of fibronectin derived from porcine small intestinal submucosa. *Tissue Eng*. 1998;4:75-83.
- Hodde J, Janis A, Hiles M. Effects of sterilization on an extracellular matrix scaffold: part II. Bioactivity and matrix interaction. *J Mater Sci Mater Med*. 2007;18(4):545-550.
- Voytik-Harbin SL, Brightman AO, Kraine MR, et al. Identification of extractable growth factors from small intestinal submucosa. *J Cell Biochem*. 1997;67(4):478-491.
- Hodde J, Janis A, Ernst D, et al. Effects of sterilization on an extracellular matrix scaffold: Part I. Composition and matrix architecture. *J Mater Sci Mater Med*. 2007;18(4):537-543.
- Internal Cook Biotech Document: 97-010 VIII.A.
- Internal Cook Biotech Document: 97-010 VIII.B.
- Internal Cook Biotech Document: 07-057.
- Internal Cook Biotech Document: 00-027.
- Clark RA. Basics of cutaneous wound repair. *J Dermatol Surg Oncol*. 1993;19(8):693-706.
- McDevitt CA, Wildley GM, Cutrone RM. Transforming growth factor-beta 1 in a sterilized tissue derived from the pig small intestine submucosa. *J Biomed Mater Res Part A*. 2003;67(2):637-640.
- Internal Cook Biotech Document: 05-128.
- Nihsen ES, Johnson CE, Hiles MC. Bioactivity of small intestinal submucosa and oxidized regenerated cellulose/collagen. *Adv Skin Wound Care*. 2008;21(10):479-486.
- McPherson JM, Piez KA. Collagen in Dermal Wound Repair. In: Clark RAF, Henson PM, editors. *The Molecular and Cellular Biology of Wound Repair*. New York: Plenum Press, 1988:471-491.
- Rizzino A. Transforming growth factor-β: multiple effects on cell differentiation and extracellular matrices. *Dev Biol*. 1988;130(2):411-422.
- Takehara K. Growth regulation of skin fibroblasts. *J Dermatol Sci*. 2000;24(suppl 1):S70-S77.
- Hurst RE, Bonner RB. Mapping of the distribution of significant proteins and proteoglycans in small intestinal submucosa by fluorescence microscopy. *J Biomater Sci Polym Ed*. 2001;12(11):1267-1279.
- Raman R, Sasisekharan V, Sasisekharan R. Structural insights into biological roles of protein-glycosaminoglycan interactions. *Chem Biol*. 2005;12(3):267-277.
- Sottile J, Hocking DC. Fibronectin polymerization regulates the composition and stability of extracellular matrix fibrils and cell-matrix adhesions. *Mol Biol Cell*. 2002;13(10):3546-3559.
- Akiyama SK. Integrins in cell adhesion and signaling. *Hum Cell*. 1996;9(3):181-186.

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